I CLAIM:

1. A pivoting panel-mount speaker assembly comprising:

a speaker housing having a perimeter flange portion and an interior curved track extending rearwardly from the perimeter flange portion, the interior curved track having an outward facing convex surface and an inward facing concave surface;

a speaker unit having a transducer element and a speaker frame supporting the transducer element, the speaker frame having an outward facing surface configured to slidably engage the inward facing concave surface of the housing interior curved track;

a speaker support member attached to the speaker unit and having an inward facing surface configured to slidably engage the outward facing convex surface of the housing interior curved track; and

a circuit panel having speaker control circuitry mounted thereon, the circuit panel mounted to the speaker housing at one or more circuit panel attachment points;

wherein the speaker unit and the speaker support member are pivotable around a pivot point that is forward of the transducer element.

2. The speaker system of Claim 1, wherein the speaker unit pivots within a range of approximately ±15° from a speaker central axis.

3. The speaker system of Claim 1, wherein the speaker unit pivots within a range of approximately ±30° from a speaker central axis.

4. The speaker system of Claim 1, wherein the speaker unit pivots within a range of approximately ±45° from a speaker central axis.

5. The speaker assembly of Claim 1, wherein the circuit panel is in a substantially unloaded state except at the circuit panel attachment points.

6. The speaker assembly of Claim 1, wherein the transducer element comprises a dome.

7. The speaker assembly of Claim 1, wherein the transducer element comprises a cone.

8. The speaker assembly of Claim 1, wherein the speaker unit does not contact the circuit panel over a full pivot range of the speaker unit.

9. The speaker assembly of Claim 1, further comprising means for mounting a secondary speaker to the speaker unit, such that the secondary speaker is also pivotable around the pivot point.

10. The speaker assembly of Claim 1, wherein a secondary speaker is tiltably mounted forward of the speaker unit, and wherein the secondary speaker pivots about the pivot point.

11. The speaker assembly of Claim 1, wherein a secondary speaker is mounted forward of the speaker unit, and wherein the secondary speaker has a fixed orientation with respect to the main speaker unit.

12. The speaker assembly of Claim 1, further comprising a protective grille structure positioned substantially parallel to the perimeter flange portion.

13. The speaker assembly of Claim 1, wherein the perimeter flange portion defines a speaker face plane, and wherein the pivot point is on the speaker face plane.

14. The speaker assembly of Claim 1, further comprising a cradle, wherein the cradle is configured to support a secondary speaker unit in front of the transducer, and wherein the secondary speaker unit is pivotable in the cradle.

15. The speaker assembly of Claim 1, further comprising a cradle assembly, wherein:

the cradle assembly comprises a plurality of forward-projecting support arms that intersect to form a recessed portion in front of the transducer;

the cradle recessed portion is configured to support a secondary speaker; and

wherein the secondary speaker unit is pivotable in the cradle recessed portion.

16. The speaker assembly of Claim 1, further comprising a cradle, wherein:

the cradle is configured to support a secondary speaker unit in front of the transducer;

the secondary speaker unit is pivotable in the cradle; and

the cradle is mounted to the speaker unit.

17. The speaker assembly of Claim 1, further comprising a cradle, wherein the cradle is configured to support a secondary speaker unit in front of the transducer, the secondary speaker unit pivotable in the cradle, wherein the cradle remains rearward of the perimeter flange potion over the full pivot range of the speaker unit.

18. The speaker assembly of Claim 1, wherein the speaker support member comprises opposing inward facing support surfaces.

19. A speaker system comprising:

a speaker support unit configured support a first speaker, the speaker support unit having an interior support member and an exterior support member, wherein the interior and exterior support members are separated by a gap;

a speaker housing having a pivot guide that is configured to be positioned in the gap between the speaker support unit interior and exterior support members, thereby allowing the speaker support unit to pivot relative to the speaker housing;

an auxiliary support structure that is mounted to the speaker support unit, and that is configured to support a second speaker that is pivotable in the auxiliary support structure, wherein the second speaker is positioned forward of the first speaker.

20. The speaker system of Claim 19, wherein the speaker support unit pivots within a range of approximately ±15° from a speaker central axis.

21. The speaker system of Claim 19, wherein the speaker support unit pivots within a range of approximately ±30° from a speaker central axis.

22. The speaker system of Claim 19, wherein the speaker support unit pivots within a range of approximately ±45° from a speaker central axis.

23. The speaker system of Claim 19, wherein:

the speaker support unit pivots about a first pivot point;

the second speaker pivots about a second pivot point; and

the second pivot point remains substantially stationary when the speaker support unit pivots about the first pivot point.

24. The speaker system of Claim 19, wherein the speaker support unit pivots about a pivot point that is located forward of the transducer.

25. The speaker system of Claim 19, wherein the speaker support unit and the second speaker pivot about a pivot point that is located forward of the transducer.

26. The speaker system of Claim 19, wherein the pivot guide comprises an interior concave annular spherical segment that is configured to slidingly engage the speaker support unit interior support member.

27. The speaker system of Claim 19, wherein the curved pivot guide comprises an exterior convex annular spherical segment that slidingly engages the speaker support unit exterior support member.

28. The speaker system of Claim 19, wherein the auxiliary support structure is mounted to the speaker support unit at no more than four attachment points.

29. The speaker system of Claim 19, further comprising a circuit panel that is mounted to a rearwardly extending portion of the speaker housing, wherein the circuit panel has a crossover network thereon.

30. The speaker system of Claim 19, further comprising a circuit panel that is mounted to a rearwardly extending exterior wall portion of the speaker housing, wherein the circuit panel has a crossover network thereon, and wherein the crossover network is configured to drive the primary speaker over a first frequency range and the auxiliary speaker over a second frequency range.

31. An apparatus comprising:

a speaker housing having a curved track with an outward facing convex surface and an inward facing concave surface;

a speaker assembly configured to support a transducer element, the speaker assembly including an outward facing surface configured to slidably engage the inward facing concave surface of the housing interior curved track;

a speaker support member attached to the speaker assembly and having an inward facing surface configured to slidably engage the outward facing convex surface of the housing interior curved track, wherein the speaker assembly and the speaker support member are pivotable around a pivot point that is forward of the transducer element.

32. The apparatus of Claim 31, further comprising an auxiliary support structure that is mounted to the speaker assembly, and that is configured to support a second speaker that is pivotable in the auxiliary support structure.

33. The apparatus of Claim 31, further comprising an auxiliary support structure that is mounted to the speaker assembly, and that is configured to support a second speaker in a fixed orientation with respect to the speaker assembly.

34. The apparatus of Claim 31, further comprising an auxiliary support structure that is mounted to the speaker assembly, and that supports a second speaker that is pivotable in the auxiliary support structure, wherein the second speaker is also pivotable around the pivot point.

35. The apparatus of Claim 31, wherein the speaker assembly further comprises a perimeter flange portion defining a speaker face plane, and wherein the pivot point is on the speaker face plane.

36. The apparatus of Claim 31, further comprising a circuit panel that is mounted to a rearwardly extending portion of the speaker assembly.

37. The apparatus of Claim 31, wherein the speaker assembly is further configured to support a stator element.

38. The apparatus of Claim 31, wherein the speaker assembly further comprises a perimeter flange portion defining a speaker face plane, wherein the curved track extends reward from the perimeter flange.

39. The apparatus of Claim 31, wherein the speaker assembly further comprises a substantially circular perimeter flange portion defining a speaker face plane, wherein the curved track extends reward from the perimeter flange.

40. A method of assembling a speaker assembly, the method comprising:

mounting a speaker support member to a main speaker unit such that a gap exists between a inward facing engagement surface of the speaker

support member and an outward facing engagement surface of the main speaker unit, wherein the speaker support member supports a first speaker;

positioning a speaker housing interior curved track portion of a speaker housing into at least a portion of the gap, such that an exterior side of the curved track portion engages the inward facing engagement surface, and an interior side of the curved track portion engages the outward facing engagement surface; and

mounting an auxiliary support structure to the speaker support member, the auxiliary support structure supporting a second speaker forward of the first speaker.

41. The method of Claim 40, further comprising mounting a circuit panel to the speaker housing at one or more attachment points, wherein the circuit panel is in a substantially unloaded state except at the attachment points.

42. The method of Claim 40, wherein the inward facing engagement surface of the speaker support member is concave.

43. The method of Claim 40, wherein the outward facing engagement surface of the main speaker unit is convex.

44. A method comprising:

positioning a main speaker unit at least partially within a speaker housing, such that an outward facing surface of the main speaker unit slidably engages an inward facing concave surface of the speaker housing; and

pivoting the main speaker unit with respect to the speaker housing, such that the main speaker unit pivots about a pivot point that is not located within the speaker housing.

45. The method of Claim 44, further comprising positioning an auxiliary speaker unit within the speaker housing.

46. The method of Claim 44, further comprising:

positioning an auxiliary speaker unit within the speaker housing; and

pivoting the auxiliary speaker unit about the pivot point.

47. The method of Claim 44, further comprising positioning an auxiliary speaker unit within the speaker housing such that the auxiliary speaker unit has a fixed orientation with respect to the speaker housing.

48. The method of Claim 44, wherein the pivot point is located on a speaker housing face plane that is defined by a perimeter flange portion of the speaker housing.

49. An apparatus comprising:

a speaker housing having a curved track with an outward facing convex surface and an inward facing concave surface;

a speaker assembly configured to support a transducer element, the speaker assembly including an outward facing surface configured to slidably engage the inward facing concave surface of the housing interior curved track;

a speaker support member attached to the speaker assembly and having an inward facing surface configured to slidably engage the outward facing convex surface of the housing interior curved track, wherein the speaker assembly and the speaker support member are pivotable around a first pivot point that is forward of the transducer element; and

an auxiliary support structure that is mounted to the speaker assembly, and that is configured to support a plurality of auxiliary speakers that are pivotable within the auxiliary support structure, wherein the auxiliary speakers are positioned forward of the transducer element.

50. The apparatus of Claim 49, wherein the auxiliary support structure supports two auxiliary speakers.

51. The apparatus of Claim 49, wherein the auxiliary speakers pivot about a single second pivot point.

52. The apparatus of Claim 49, wherein at least one of the auxiliary speakers pivots about the first pivot point.

53. The apparatus of Claim 49, further comprising a circuit panel that is mounted to a rearwardly extending portion of the speaker housing.

54. The apparatus of Claim 49, further comprising:

a circuit panel that is mounted to a rearwardly extending portion of the speaker housing; and

a crossover network included on the circuit panel, wherein the crossover network is configured to drive the transducer element over a first frequency range, and to drive the auxiliary speakers over a second frequency range.

55. The apparatus of Claim 49, further comprising a circuit panel that is mounted to a rearwardly extending portion of the speaker housing at a plurality of attachment points, wherein the circuit panel is in a substantially unloaded state except at the attachment points.